[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0588; Directorate Identifier 2012-NM-017-AD; Amendment

39-17210; AD 2012-20-04]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model DHC-8-400 series airplanes. This AD was prompted by reports of chafing between the wire harness along the wing leading edge and the inboard end rib of the wing leading edge due to insufficient clearance. This AD requires inspecting the wire harness along the leading edge for chafing damage, and repair if necessary; and relocating and installing new anchor nuts. We are issuing this AD to detect and correct chafing damage to the wire harness along the wing leading edge, which if not corrected, could lead to the loss of the airframe de-icing system, and could become a possible ignition source causing fire.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a

certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Assata Dessaline, Aerospace Engineer, Avionics and Flight Test Branch, ANE-172, FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7301; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the <u>Federal Register</u> on June 5, 2012 (77 FR 33125). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

There have been several in-service reports of chafing between the wire harness along the wing leading edge and the wing leading edge inboard end rib. The chafing condition was found to be caused by insufficient clearance between the wire harness and the structure. Chafing and damage to this wire harness could lead to the loss of the airframe de-icing system, and could be a possible ignition source causing fire and the subsequent loss of the aeroplane.

This [Transport Canada Civil Aviation] Airworthiness Directive (AD) mandates [a detailed] inspection of the wire harness along the leading edge [for chafing damage, and repair if necessary] and the relocation [and installation of new] anchor nut[s].

You may obtain further information by examining the MCAI in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comment received.

Request to Include Latest Revision of Service Information

Horizon Air (Horizon) requested that we revise the proposed rule (77 FR 33125, June 5, 2012) to reflect the latest revision of the service information. Horizon pointed out that Bombardier Service Bulletin 84-57-24, dated September 30, 2011, referenced in that NPRM contained an error in a work step that needed to be corrected.

We agree. Bombardier has issued Service Bulletin 84-57-24, Revision A, dated August 6, 2012. This service bulletin was revised to correct a reference to a figure in a work step. We have changed this final rule to reference Bombardier Service Bulletin 84-57-24, Revision A, dated August 6, 2012, throughout. We have also added paragraph (i) of this final rule to give credit for actions performed before the effective date of this AD using Bombardier Service Bulletin 84-57-24, dated September 30, 2011.

Conclusion

We reviewed the available data, including the comment received, and determined that air safety and the public interest require adopting the AD with the changes described previously and minor editorial changes. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 33125,
 June 5, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 33125, June 5, 2012).

Costs of Compliance

We estimate that this AD will affect 83 products of U.S. registry. We also estimate that it will take about 9 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$0 per product. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$63,495, or \$765 per product.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
 - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (77 FR 33125, June 5, 2012), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

2012-20-04 Bombardier, Inc.: Amendment 39-17210. Docket No. FAA-2012-0588; Directorate Identifier 2012-NM-017-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. Model DHC-8-400, -401, and -402 airplanes, certificated in any category, serial numbers 4001 through 4382 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 57: Wings.

(e) Reason

This AD was prompted by reports of chafing between the wire harness along the wing leading edge and the inboard end rib of the wing leading edge due to insufficient clearance. We are issuing this AD to detect and correct chafing damage to the wire harness along the wing leading edge, which if not corrected, could lead to the loss of the airframe de-icing system, and could become a possible ignition source causing fire.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Inspection and Repair

Within 3,000 flight hours or 18 months after the effective date of this AD, whichever occurs first: Perform a detailed inspection for chafing damage of the wire harness at the leading edge, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-57-24, Revision A, dated August 6, 2012. If any chafing damage is found: Before further flight, repair in accordance with the

Accomplishment Instructions of Bombardier Service Bulletin 84-57-24, Revision A, dated August 6, 2012.

(h) Installation of New Anchor Nuts

Within 3,000 flight hours or 18 months after the effective date of this AD, whichever occurs first: Relocate and install new anchor nuts on the leading edge, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-57-24, Revision A, dated August 6, 2012.

(i) Credit for Previous Actions

This paragraph provides credit for actions required by paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 84-57-24, dated September 30, 2011.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the

local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(k) Related Information

- (1) Refer to MCAI Canadian Airworthiness Directive CF-2012-05, dated January 13, 2012; and Bombardier Service Bulletin 84-57-24, Revision A, dated August 6, 2012; for related information.
- (2) For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet http://www.bombardier.com. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
 - (i) Bombardier Service Bulletin 84-57-24, Revision A, dated August 6, 2012.
 - (ii) Reserved.
- (3) For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet http://www.bombardier.com.
- (4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.
- (5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html. Issued in Renton, Washington, on September 27, 2012.

Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service. [FR Doc. 2012-24523 Filed 10/09/2012 at 8:45 am; Publication Date: 10/10/2012]